



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,400	11/04/2003	Peter A. Quigley	FPY-048.04	5827

25181 7590 03/17/2006

FOLEY HOAG, LLP  
PATENT GROUP, WORLD TRADE CENTER WEST  
155 SEAPORT BLVD  
BOSTON, MA 02110

EXAMINER
----------

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/700,400

Applicant(s)

QUIGLEY ET AL.

Examiner

Elizabeth M. Cole

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

Art Unit: 1771

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 50-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomeer et al, U.S. Patent No. 5,828,003 in view Charboneau, U.S. Patent No. 5,551,484. Thomeer discloses a composite tubing which can be coiled, (i.e., spoolable) which comprises an inner layer which corresponds to the claimed impervious layer, fiber reinforced composite layers wherein at least one of the layers comprises fibers which are wrapped circumferentially around the longitudinal axis of the tubing. See figures 6a-6d. The tubing can further comprise conductive wires located within the tubing which are able to communicate at various locations on the tubing. See col. 8, lines 48-52. Thomeer differs from the claimed invention because it does not disclose that the tubing comprises a sensor. Charboneau discloses a lining for pipelines which may include an optical fibers which is in the liner for purposes of monitoring stress or for communication, and which further comprises a capacitance leak detection circuit in the liner. Charboneau teaches that the optical fibers can be connected to a stress detector to monitor the liner when it is installed in a pipeline. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated

Art Unit: 1771

optical fibers for the purpose of monitoring stresses in the tubular member of Thomeer et al, motivated by the expectation that this would enable pipelines which employed the liners to be monitored for possible problems.

4. Claims 1-62 are rejected under 35 U.S.C. 103(a) as being obvious over Quigley et al, U.S. Patent NO. 6,016,845 in view of Charboneau, U.S. Patent No. 5,551,484.

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Art Unit: 1771

5. Claims 1-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quigley et al, U.S. Patent No. 6,016,845 in view of Charboneau, U.S. Patent No. 5,551,484. Quigley et al discloses a composite spoolable tube comprising an inner impermeable layer, a composite layer comprising triaxially woven fibers in a matrix and a pressure barrier layer. The triaxial weave will necessarily form the fiber configuration having the helical fibers, clockwise fibers and counter clockwise fibers. Further, Quigley teaches that the fibers can be circumferentially wrapped relative to the longitudinal axis. See col. 4, line 4, line 1- col. 5, line 33. The tubing can further comprise an elongated conductor which is formed as an integral part of the tube. Quigley differs from the claimed invention because Quigley does not disclose that the tubing should comprise a sensor. Charboneau discloses a lining for pipelines which may include an optical fibers which is in the liner for purposes of monitoring stress or for communication, and which further comprises a capacitance leak detection circuit in the liner. Charboneau teaches that the optical fibers can be connected to a stress detector to monitor the liner when it is installed in a pipeline. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated optical fibers for the purpose of monitoring stresses in the tubular member of Quigley et al, motivated by the expectation that this would enable pipelines which employed the liners to be monitored for possible problems.

***Double Patenting***

6. Claims 1-62 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-67 of U.S. Patent No. 5,921,285 in view of Charboneau. Although the conflicting claims are not identical, they are not patentably distinct from each other because discloses a composite spoolable tubing having an impervious layer, a composite layer comprising a triaxially woven fabric, and a first elongated conductor, and further comprising a pressure barrier layer. US '285 differs from the claimed invention because it does not disclose combining a sensor with the spoolable tubing. Charboneau discloses a lining for pipelines which may include an optical fibers which is in the liner for purposes of monitoring stress or for communication, and which further comprises a capacitance leak detection circuit in the liner. Charboneau teaches that the optical fibers can be connected to a stress detector to monitor the liner when it is installed in a pipeline. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated optical fibers for the purpose of monitoring stresses in the tubular member of US '285 et al, motivated by the expectation that this would enable pipelines which employed the liners to be monitored for possible problems.

7. The terminal disclaimer filed on 2/7/06 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 10/134,971 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Art Unit: 1771


8. The examiner regrets that the double patenting rejections were not made earlier. The double patenting rejection was omitted by mistake. Similarly, when the double patenting rejection over 6,016,845 was made the 103 rejection should also have been made since that patent has a different inventive entity and an earlier filing date than the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

  
Elizabeth M. Cole  
Primary Examiner  
Art Unit 1771

e.m.c